

ABSTRACT

An apparatus operable in a wet environment for controlling the brightness and color of a solid state light emitting diode, lamp assembly which is adapted to be coupled to an AC source for supplying an AC signal. A plurality of switching devices is connected in series with the lamp assembly and light emitting diodes. The switching devices are operative in a first state, wherein significant current flowing through the lamp assembly is prevented or a second analogue state wherein current flow through the lamp assembly is continuously variable. User controls provide lamp assembly brightness and color input signals to a controller. Also included is a controller means for receiving lamp assembly brightness and color input signals from the user controls, and for switching the switching devices between the first and second states in a predetermined sequence for inducing analogue power signals to the lamp assembly. The isolation means for electrically isolating the user controls from the AC source, includes an electrical current barrier.